

**CLAIMS**

1           1.    A method comprising:  
2           performing Voice over Internet Protocol (VoIP) routing in  
3           a network including forcing packets carrying media in a VoIP  
4           call through managed network elements of a specific Internet  
5           Protocol (IP) address with a call signaling and selected media  
6           proxy.

1           2.    The method of claim 1 wherein the packets originate  
2           in an originating VoIP network endpoint.

1           3.    The method of claim 1 wherein the packets comply  
2           with RTP.

1           4.    The method of claim 1 wherein forcing comprises  
2           receiving call signaling information from an originating VoIP  
3           network endpoint.

1           5.    The method of claim 4 wherein forcing further  
2           comprises relaying the call signaling information through the  
3           call signaling proxy to a destination VoIP network element.

1           6.    The method of claim 5 wherein forcing further  
2           comprises directing the originating VoIP network endpoint to  
3           use the selected media proxy.

1           7.    The method of claim 6 wherein forcing further  
2           comprises streaming the packets to a media proxy in a selected  
3           media proxy server.

1           8.    The method of claim 7 wherein forcing further  
2 comprises replacing an Internet Protocol address of the  
3 selected media proxy and the call signaling proxy with an  
4 address of a next hop in the network.

1           9.    The method of claim 4 wherein replacing comprises  
2 using Network Address Translation (NAT).

1           10.   The method of claim 4 wherein the next hop comprises  
2 a terminating VoIP network endpoint.

1           11.   The method of claim 1 wherein the selected media  
2 proxy includes a list of static virtual Internet Protocol  
3 addresses that represent media network endpoints, gateways and  
4 other media proxies.

1           12.   The method of claim 1 wherein the selected media  
2 proxy includes a list of dynamic virtual IP addresses that  
3 represent media network endpoints, gateways and other media  
4 proxies.

1           13.   The method of claim 9 wherein Network Address  
2 Translation (NAT) hides the terminating VoIP network endpoint  
3 from a call originator.

1           14.   The method of claim 9 wherein Network Address  
2 Translation (NAT) hides an originating VoIP network endpoint  
3 address from a terminating VoIP network endpoint address.

1           15. The method of claim 4 wherein relaying comprises  
2           selecting call signaling and media proxy servers that provide  
3           a predetermined quality of service.

1           16. The method of claim 1 wherein selecting comprises  
2           testing a quality of a network connection from the originating  
3           VoIP network endpoint point of presence (POP) to each of the  
4           call signaling and media proxy servers.

1           17. The method of claim 16 wherein testing comprises  
2           using a series of pings to determine a closest call signaling  
3           and media proxy server.

1           18. The method of claim 16 wherein testing comprises  
2           using trace routes to determine a closest call signaling and  
3           media proxy server.

1           19. A method comprising:  
2                 receiving call signaling information from an  
3           originating Voice over Internet Protocol (VoIP) endpoint;  
4                 relaying the call signaling information to a  
5           destination VoIP endpoint;  
6                 directing the originating VoIP endpoint to use a RTP  
7           media proxy; and  
8                 receiving a stream of media to the RTP media proxy  
9           from the originating VoIP endpoint.

1           20. The method of claim 19 wherein directing comprises:  
2               determining an address of the destination VoIP  
3 endpoint; and  
4               obtaining virtual addresses from the RTP media  
5 proxy.

1           21. The method of claim 20 wherein the virtual addresses  
2 represent media endpoints, gateways, PC clients, application  
3 servers and other media proxies.

1           22. A method for controlling RTP routing comprising:  
2               sending call signaling information from an  
3 originating VoIP endpoint to a call signaling proxy;  
4               relaying the call signaling information from the  
5 call signaling proxy to a destination VoIP endpoint; and  
6               sending a stream of media from the originating VoIP  
7 endpoint to a RTP media proxy.

1           23. The method of claim 22 wherein the RTP media proxy  
2 comprises virtual IP addresses of media endpoints, media  
3 gateways and other RTP media proxies.

1           24. The method of claim 22 wherein the RTP media proxy  
2 comprises dynamic IP addresses of media endpoints, media  
3 gateways and other RTP media proxies.

1           25. The method of claim 22 wherein the RTP media proxy  
2 comprises static IP addresses of media endpoints, media  
3 gateways and other RTP media proxies.

1           26. The method of claim 22 further comprising replacing  
2 an IP address of the call signaling proxy and the RTP media  
3 proxy with an IP address of a next hop endpoint.

1           27. The method of claim 24 wherein replacing comprises  
2 network address translation (NAT).

1           28. A computer program stored on a computer-readable  
2 mechanism, the computer program comprising instructions that  
3 cause a computer to:

4                 force packets carrying media in a VoIP call through  
5 managed network elements of a specific Internet Protocol (IP)  
6 address with a call signaling and selected RTP media proxy.

1           29. A computer program stored on a computer-readable  
2 medium, the computer program comprising instructions that  
3 cause a computer to:

4                 receive call signaling information from an  
5 originating Voice over Internet Protocol (VoIP) endpoint;

6                 relay the call signaling information to a  
7 destination VoIP endpoint;

8                   direct the originating VoIP endpoint to use a RTP  
9   media proxy; and

10                  receive a stream of media to the RTP media proxy  
11   from the originating VoIP endpoint.